

#572  
9005 - 9103 ✓

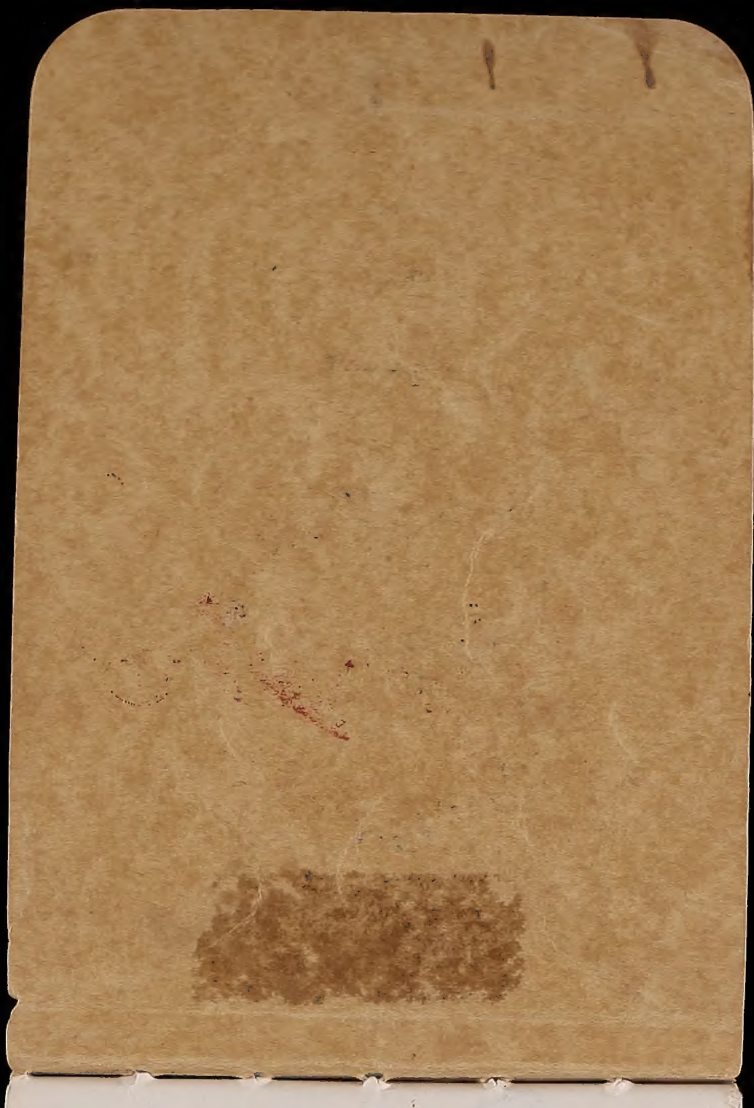
Velvet Finish  
Red Quille  
Writing paper.

## NOTES

No. 429

Name \_\_\_\_\_

\_\_\_\_\_ Grade



\$5.<sup>00</sup> Reward

for return to

Dr. Arthur Cronquist  
New York Botanical Garden  
Bronx Park  
New York 58, N.Y.

0.572

9005. May 13, 1961 On barren,  
rocky east slope, with scattered  
junipers, at west edge of valley  
leading out of Peter's Canyon,  
13 miles north of Monticello,  
San Juan Co, Utah. Twp. 31 S.,  
R. 23 or 24 E. Elevation about 6000  
ft. Corolla with a yellowish  
throat and lavender limb.

*Gilia sinuata* Dougl., sens. lat.  
(the *G. inconspicua* phase)

*Gilia affinis*

(24)



9006 - May 13, 1961  
Same place as ~~805~~, 9005  
Corolla lavender.

*Gilia pumila* Nutt.

*Eriogonum*

(1)



9007. May 13, 1961

With scattered junipers on  
rocky east slope, and with  
*Sarcobatus* on the adjacent  
sandy flat; valley leading  
out of Peter's Canyon, 13 miles  
north of Monticello, San Juan  
Co, Utah. Twp 31 S, R. 23 or 24 E.  
Elevation about 6000 feet.  
Flowers white.

*Phacelia inesioides* Torr.  
var. *inesioides*

*Phacelia*

(13)



9008 - May 13, 1961 - *Juniper*  
suvalland on west exposure in  
Peter's Canyon, 8 miles north  
of Monticello, San Juan Co., Utah.  
Twp. 32 S., R. 23 E., S. 24. Elevation  
6700 feet. Lower lip and tip of  
the galea dull dark red-purple,  
the rest of the corolla pale,  
almost white.

*Pedicularis centranthera* Gray

*Pedicularis centranthera* (4) ✓

9009 - May 13, 1961.

Barren clay slopes overlooking  
Cottonwood Wash from the east  
8 miles southwest of Blanding,  
San Juan Co., Utah. Twp. 37 S.,  
R. 21 E., S. 13 or 24. Elevation  
about 5500 feet. Herbage  
glaucous; petals purple;  
bracts white.

*Cymopterus bulbosus* A. Nels.

1295

*Cymopterus* (2)



9010 - May 14, 1961 Sandy soil  
of sagebrush flats in Comb Wash,  
18 miles southwest of Blanding,  
San Juan Co., Utah. Twp. 37S.,  
R. 20E., S. 25. Elevation 5000 feet.  
Herbage glaucous. Flowers  
bright yellow.

*Corydalis aurea* Willd.  
var. *occidentalis* Engelm.

*Corydalis* (35)

9011 - May 14, 1961 Sandy,  
gravelly flat along wash  
leading out of Arch Canyon,  
where it joins Comb Wash,  
18 miles southwest of Blanding,  
San Juan Co., Utah. Twp. 37 S.,  
R. 20 E., S. 25. Elevation 5000 feet.  
Stems solitary (seldom 2) on a  
perennial taproot. Plants some-  
what mesphitic. Corolla bright  
red, verging toward carmine.

*Gilia subnuda* Torr.

red *Gilia*

(35)



9012 - May 15 1961 - Same place  
as 9011. Leaves bright green,  
not glaucous; flowers yellow.

*Cymopterus fendleri* Gray

yellow *Cymopterus*

(8)



90 May 14, 1961 - Same place  
as 9011. Plants pungently  
hispid. Corolla white  
with a yellow eye. The  
lobes persistently spreading,  
not becoming reflexed.

*Cryptantha bakeri* (Greene) Payson

*Oreocarya* (3)

9014 - May 14, 1961 - Same place  
as 9011.

Stems prostrate,  
forming a mat on the ground.  
Corolla lavender, the keel deeper  
purple toward the tips.

*Astragalus sesquiflorus* Wats.

det. R. C. Barneby

*Astragalus* ①



9015 - May 14, 1961  
Sandy soil in sagebrush  
flats at mouth of Arch  
canyon, where it enters  
Cortez Wash, 18 miles  
southwest of Blanding,  
San Juan Co., Utah. Twp. 37 S.,  
R. 20 E., S. 25. Elevation 5000  
feet. Flowers white.

*Cryptantha crassiseptala*  
(T. & G.) Greene

*Cryptantha* 25 ✓

7016 - May 14, 1961 - Sandy  
soil under cottonwoods at  
mouth of Arch Canyon,  
where it enters Comb Wash,  
18 miles southwest of Blanding,  
San Juan Co., Utah. Twp. 37S.,  
R. 20 E., S. 25. Elevation 5000 feet.  
Corolla minute, white.

*Cryptantha recurvata*  
Coville

*Cryptantha* (10) ✓

9017 - May 14, 1961

Pinon-juniper woodland 21  
miles southwest of Blanding,  
San Juan Co., Utah. Twp. 37S.,  
R. 20E., S. 27 or 28. Elevation  
5900 feet. Plants spreading  
extensively below-ground, but  
eventually taprooted. Herbage  
somewhat glaucous. Flowers  
bright lavender-purple.

*Lathyrus zionis* C. L. Hitchc.

*Lathyrus*

(16)



9018 May 15 1961 - associated with  
a pale, shaly outcrop in a red  
sandstone region, piñon-juniper  
community, White Canyon,  
a little above its junction  
with Fry Canyon, about 55  
miles west of Blanding and  
30 miles east of Hite, San Juan  
Co., Utah, Twp 36S., R. 16E., about  
S. 14. Elevation about 5600 feet.  
Ray pale lavender.

✓  
*Erigeron argentatus* Gray

*Erigeron argentatus* (4) ✓

9519 May 15 On soil  
derived from red sandstone,  
and also from a pale shaly out-  
crop; piñon-juniper community;  
White Canyon, a little above  
its junction with Fry Canyon,  
about 55 miles west of Blanding,  
and 30 miles east of Hite, San  
Juan Co., Utah, Twp 36 S., R. 16  
E., about S. 14. Elevation about  
5600 feet. Flowers bright  
pink-purple.

*Astragalus amphioxys* Gray  
var. *vespertinus* (Sheld.) Jones

det. R. C. Barneby

*Astragalus vespertinus* (6) ✓



9020 May 15, 1961 - Same  
place as 9018.

Flowers white  
Leaf solitary, thick, sub-  
terete, shallowly grooved  
on the upper side.

*Allium nevadense* S. Wats.  
dupl. det. Marion Cunningham

*Allium*

③



9021 - May 15, 1961 With  
scattered junipers in red  
sandstone area about 70 miles  
west of Blanding and 16 miles  
east of Hite, San Juan Co.,  
Utah. Twp. 35 S., R 15 E. Elevation  
about 4700 feet

Gnarled, branching shrubs or  
subshrubs from a coarse, woody  
taproot, the persistent, woody  
part of the stem mostly 1-2 (3)  
dm. tall. Rays pale lavender.

*Machaeranthera tortifolia*  
(T. & G.) Cronq. & Keck  
var. *imberbis* Cronq.

*Machaeranthera tortifolia* (5)

9022 - May 15, 1961. Same place  
as 9021.

Bracts bright red.

*Castilleja chromosa* A. Nels.  
dupl. det. Marion Crunley

*Castilleja chromosa* (4)



9023 - May 15, 1961 - Same place  
as 9021. Flowers yellow.  
Stems clustered on a taproot  
and branching caudex.

*Cryptantha flava* (A. Nels.) Payson

Yellow *Cryptantha* (4)

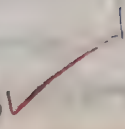


9029 - May 15, 1961 - Same place  
as 9021. Flowers lavender-purple.

*Astragalus sabulosus*<sup>17</sup> Gray  
det. R. C. Barneby

not *Astragalus*

(9)





9025 - May 15, 1961 - Same  
place as 9021. Flowers dark  
blue-purple, the banner with  
a large central pale spot.

*Lupinus pusillus* Pursh  
var. *rubens* (Rydb.)

annual lupine

(2)



9026 - May 15, 1961 - open,  
elevated flats in *Callisagme* community  
about 75 miles west of Blanding and  
10 miles east of Hite, San  
Juan Co., Utah. Twp. 34 S., R. 14 E.  
Elevation about 4200 feet  
Ray white above, pale pinkish-lav-  
ender beneath.

*Townsendia annua* Beaman

*Townsendia* ⑨



9027 - May 5, 1961 Same  
place as 9026. Branches very  
widely to rather narrowly  
spreading-ascending. Corolla  
white.

polycladon

*Gilia polycladon* Torr.

*Gilia* - *spreada*

(11)



9028 - May 15, 1961 - Same  
place as 9026. Heads white.

*Chaenactis stevioides* H. & A.

✓

*Chaenactis*

(11)

✓

9029 - May 15. 19. Same  
place as 9026. Abundant.  
Flowers dark blue-purple.  
Plants mildly mesphitic.

*Phacelia crenulata* Torr., sens. lat.  
(*P. corrugata* A. Nels.)



1524

*Phacelia* 18



9030- May 16, 1961 - With  
Tulegym, Atypical and Epilobium  
on open sandy slopes and  
elevated flats 10 miles east  
of Hite, San Juan Co., Utah, Twp.  
34 S., R. 14 E. Elevation about 4200 feet  
Flowers bright yellow, open  
in the afternoon, closed in the  
morning. Stems white.

About 75 miles west of Blanding and

*Mentzelia pumila* (Nutt.) T. + G.

*Mentzelia* (5)

9031 - May 16, 1961 Same  
place as 9030 - Herbage  
glaucous. Sepals and lower petals  
blue to purplish, the upper  
petals white or nearly so

*Delphinium scaporum* Greene



Larkspur

(13)





9032 - May 16, 1961

Same place as 9030.

Stems more or less scented - flexuous.

Petals lavender, marked at the base with yellow, orange, and dark red.

*Calochortus flexuosus* Wats.

*Calochortus*

(4)

✓

9033 - May 16, 1961 open,  
sandy slopes and ridges  
with *Coleogyne*, *Atriplex* and  
*Artemisia*, 10 miles east of  
Hite, San Juan Co., Utah.  
Twp. 34 S., R. 14 E. Elevation about 4200 feet

Herbage glaucous; sepals pale,  
lanceolate + achroous; petals  
light yellow.

about 75 miles west of Blanding and

*Carlaanthus*

(2)

9034 - May 16, 1961. Sandy  
overflow - channel of dry wash  
in Coleogyne - Atriplex - Ephedra  
community, 10 miles east of  
Hite, San Juan Co, Utah. Twp.  
34S., R 14E. Elevation about 4200 feet

Leaves forming a flat rosette on or  
a little above the ground surface.

~~Growing with A.~~

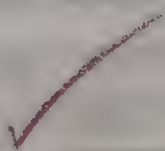
~~(which is not confined to the wash)~~  
~~and remaining distinct~~

about 75 miles west of Blanding and)

*Gilia leptomeria* Gray ✓

*Gilia*

(17)



9035 - May 16, 1961.

Same place as 9033. Flowers  
white, with an inconspicuous  
yellowish eye. Species notable  
in the field for its open inflorescence.

*Cryptantha tenuis* (Eastw.)  
Payson

*Oreocarya* (5)

9036 - May 16, 1961. Same place  
as 9033. Flowers white.

*Cryptantha nevadensis* Nels. &  
Kennedy ✓

~~is not for mistle!~~

Annual *Cryptantha* Lk.

(7) ✓

9037. May 16, 1901. Open,  
sandy ridges, slopes, and  
elevated flats, with *Coleogyne*,  
*Atriplex* and *Ephedra*, 10 miles  
east of Hite, San Juan Co., Utah.

Twp. 34 S., R 14 E. Elevation about 4200 feet

Leaves green, not glaucous.

Flowers yellow. Wings of the  
fruit crinkled, becoming  
white - cartilaginous at maturity

about 75 miles west of Blanding and

*Cymopterus fendleri* Gray

*Cymopterus*

(12)

9038. May 16, 1961. Crevices in  
sandstone rock near bottom of  
White Canyon, 8 miles east of  
Hite, about 80 miles west of  
Blanding, San Juan Co., Utah.  
Twp. 34 or 35 S., R. 14 E. Elevation  
3700 feet. Flowers lavender.

*Penstemon comarophorus*  
Gray



*Penstemon*

①





9139 - May 16, 1961 Sand at  
edge of dune in White Canyon,  
8 miles east of Hite, about 80  
miles <sup>west</sup> ~~east~~ of Blanding, San Juan  
Co., Utah. Twp. 34 or 35 S., R. 14 E.  
Elevation 3700 feet. Flowers  
white or nearly so.

*Gilia gunnisoni* T. & G.

*Gilia* sp.

(31)



9040 - May 16, 1961 Same  
place as 9039.  
Perianth yellow.

*Eriogonum wetherillii*  
Eastw.

*Eriogonum* cf. *virginicum* (5) ✓ yellow

9001 May 16 1901.  
Same place as 9039. Corolla  
minute, white.

*Cryptantha circumscissa*  
(H. & A.) Johnston.  
var. *circumscissa*.

*Cryptantha circumscissa*



9042 - May 16, 1961 On gravel  
bank composed largely of  
water-worn stones, 3 miles  
east of Hite, about 85 miles west  
of Blanding, San Juan Co., Utah.  
Twp. 34 S., R. 14 E. Elevation  
about 3700 feet. Rays 7-10,  
typically 8, yellow; disk  
dark reddish.

*Gaillardia pinnatifida* Torr.

*Gaillardia*

(3)



7043 - May 16, 1941 Sandy,  
gravelly slope above the  
Colorado River, 2.5 miles north  
of Hite, about 50 miles south  
of Hanksville, Garfield Co., Utah.  
Twp 34 S., R. 13 E., about S. 22.  
Elevation 3500 feet. Flowers  
blue, the banner with a central  
paler spot.

*Lupinus pusillus* Pursh  
var. *nubens* (Rydb.)

*Lupinus*

(22)



9044. May 16, 1961. Dry  
rocky slopes overlooking the  
Colorado River about 10 miles  
northeast of Hite, Garfield Co.,  
Utah. Twp. 34 S., R. 13 E. Elevation  
about 3600 feet. Heads yellow.  
Raip about 13-21.

*Dyssodia pentachaeta* (DC.)  
Rob.

*Dyssodia*

(5)

9045 - May 16, 1961 Rocky  
slopes and alkaline, sandy  
flats near the Colorado River  
about 4 miles northeast of Hite,  
about 50 miles south of Hanks-  
ville, Garfield Co., Utah.  
Twp. 34 S., R. 13 E. Elevation  
about 3600 feet. Flowers  
6-merous; corolla white.

*Cressa trutillensis* HBK.

✓

1664

like *perennis*!

(2)

✓



9046 - May 17, 1961 - Op.  
Gravelly slopes along the Colorado  
River about 4 miles northeast of  
Hite, about 50 miles south of  
Hanksville, Garfield Co., Utah.  
Twp. 34 S., R. 13 E. Elevation  
about 3600 feet. Much branched,  
thorny shrubs 3-6 m. tall.  
Flowers at first bright dark  
purple, fading to pale lavender  
with increasing age.

*Dalea thompsoniae* (Vail)  
L. O. Wms.

May 17, 1961

Open, sandy, gravelly places,  
with atriplex, along the Colorado  
River about 4 miles northeast  
of Hite, Garfield Co., Utah.

Twp. 34 S., R. 13 E. Elevation  
about 3500 feet. Heads yellow.  
Receptacle long-setose.

Achenes 2.5-3 mm. long, 2 to 4  
of the pappus bristles stouter  
than the others and persistent.

*Malacothrix glabrata* Gray

9048- May 17, 1961 - Same  
place as 9047. Herbage  
glaucous; heads yellow. Recep-  
tacle long-setose. Achenes 2.2-2.5  
mm. long, the pappus wholly  
deciduous.

*Malacothrix sonchoides* (Muhl.)  
T. & G.

*Malacothrix* (13) ✓

7-49 May 17, 1941 - Open,  
gravelly slopes overlooking  
the Colorado River about 4  
miles northeast of Hite,  
about 50 miles south of  
Hanksville, Garfield Co., Utah.  
Twp. 34 S., R. 13 E. Elevation  
about 3600 feet. Petals small,  
yellow. Leaves a peculiar shade  
of bright gray-green, peppered  
with small, darker green spots.

*Oenothera walkeri* (A. Nels.)

Raven

ssp. *walkeri*

Dupl. det. Peter H. Raven

*Oenothera*

(13)

9050 May 17, 1961 - Same place  
as 9049. Corolla lavender.

*Lygodesmia exigua* Gray

*Lygodesmia exigua* (3)

9051 - May 17, 1961

Same place as 9049.

*Caralla laurula*. Seeds not  
becoming mucilaginous  
when wetted.

*Gilia hutchinsifolia* Rydb.

*Gilia aff. serotina*

(3)

1052 - May 17, 1961 - Same  
place as 9049.

Plants now mostly post-mature

*Stylocline micropoides* Gray

*Stylocline*

(3)





9053 - May 17, 1941  
Same place as 9049.

*Cryptantha pterocarya* (Torr.)  
Greene  
var. *cycloptera* (Greene)  
Machbr.

*Cryptantha* (3)



705 - May 17, 1961 - Sandy flats,  
with *Atriplex* and *Sarcobatus*,  
along the Colorado River  
about 4 miles northeast of Hite,  
about 50 miles south of Hanksville,  
Garfield Co., Utah.  
Twp. 34S, R. 13E. Elevation  
about 3500 feet.

*Distichlis striata* (Torr.) Rydb.

*Distichlis*

(4)



9025 217. Very  
sandy, almost tree-like soil  
along North Wash, 16 miles  
north of Hite and 35 miles  
south of Hanksville, Garfield  
Co., Utah. Twp. 32 S., R. 13 E.  
Elevation 4200 feet. Freely  
branched shrubs 3-10 dm.  
tall, pleasantly aromatic.  
Corolla pale blue-lavender

*Poliomintha incana* (Torr.)  
Gray



*Poliomintha incana*  
shrubby mint

(34)



905L- May 17, 1961 Very sandy  
slopes along dry wash  
22 miles north of Hite and  
31 miles south of Hanksville,  
about 1 mile along the  
road below the top of the mesa,  
Garfield Co., Utah. Twp. 32S.,  
R. 12E., S. 14. Elevation 4600  
feet. Stems numerous on  
a stout taproot and much  
branched caudex. Heads yellow,  
with mostly 12-18 rays.

*Wyethia scabra* Hook.

*Wyethia scabra* 12

May 17, 1912. Same  
place as 9056. Stems  
numerous on a taproot and  
much branched caudex.  
Juice milky. Corolla numerous  
blue-lavender.

*Amsonia tomentosa* Torr. & Frem.

apoc

(9)

*Amsonia*

7056 - May 20, 1961  
Sandy soil in open piñon-juniper  
forest 7 miles west of  
Duchesne, Duchesne Co., Utah.  
Elevation about 5800 ft.  
Corolla blue-purple

*Penstemon dolius* Jones

small *Penstemon* (10)



9059 - May 20, 1961

Same place as 9058.

Herbage glaucous. Corolla  
medium blue, with a  
whitish ring at the throat

*Penstemon pachyphyllus* Gray

large *Penstemon* (2) ✓

9060 - May 20, 1961  
Same place as 9058.  
Corolla white.

*Gilia congesta* Hook.  
var. *congesta*

*Gilia congesta* (1) ✓



7067 - May 20, 1958  
Same place as 7058. Corolla  
bright pink-purple, the  
inner with some whitish  
lines near the middle.

*Astragalus detritalis* Jones

det R. C. Barneby

*Astragalus* (4)



9062 - May 20, 1961  
Same place as 9058. Heads white,  
turning pinkish or  
brownish-pink in age.

*Chamaechaenactis scaposa* (Eastw.)  
Rydb.  
near Panama Preece & Turner

*Chamaechaenactis* 9

9563 - May 20, 1961  
Same place as 9058. Heads  
yellow; rays 12-16.

*Hymenoxys acaulis* (Pursh) Parker  
var. *caespitosa* (A. Nels.) Parker

7

*Laysanappus* (4)

7064 - May 22, 1961 Thin pockets of  
soil on shelving sandstone rocks  
in open pines - juniper woodland  
16 miles northwest of Moab,  
Grand Co., Utah. Twp. 25S., R. 20E.,  
S. 8. Elevation 4900 feet.

Stems clustered at a taproot and  
branched caudex. Corolla white  
with a conspicuous yellow eye,  
the fimbriae prominent, erect,  
the lobes more or less reflexed.

*Erythraea fulvocanescens*  
(Gray) Pays.

*Artemisia*

(5)

9065 - May 22, 1961 Same  
place as 9064. Leaves very  
pungent, especially the  
persistent ones from last year.  
Petals tipped with dull red-purple  
above a light yellowish base.  
Plants forming cushion mats.

*Arenaria eastwoodiae* Rydb.  
var. *adenophora* Kearney +  
Peckles

*Arenaria* (4)



*Artemisia* (4) ✓

9066 - May 22, 1961 On  
flat-lying sandstone rocks in  
open piñon-juniper woodland  
16 miles northwest of Hatch, Grant  
Co., Utah. Twp. 25 S., R. 20 E.,  
S. 8. Elevation 4900 feet.  
Shrub 1-2 m. tall.

*Frasinus anomala* Torr.

*Frasinus anomala*

(6) ✓

9067 - May 22, 1961

Partly stabilized dunes in  
piñon-juniper area 16 miles  
northwest of Moab, Grand  
Co., Utah. Twp 25S., R. 20E.,  
S. 8. Elevation 5100 feet.

Rays dark pinkish outside,  
paler inside.

*Townsendia incana* Nutt

*Townsendia*

(2)



9068. May 22, 1961 - Same place  
as 9067. Corolla achrileous or  
faintly lavender. Pads inflated,  
red-brown with achrileous  
markings.

*Astragalus ceramicus* Sheld.

det. R. C. Barneby.

*Placa longistylis*

(1)





9265 - May 22, 1961 Sandy  
soil in Coleogyne community  
33 miles (by circuitous road) west  
of Moab, Grand Co., Utah.  
Twp. 26 S., R. 18 E. Elevation  
about 5200 feet. Stems clustered  
on the subterranean crown of a  
tapered. Sepals pale greenish;  
petals pale yellow or pale  
greenish-yellow.

*Asclepias macrosperma* Eastw.

*Asclepias* (4) ✓

9070 - May 22, 1961 - Sandy soil  
in open piñon-juniper community  
along the ridge between the Colorado  
River and the Green River,  $4\frac{1}{2}$  miles  
southwest of The Neck, and  
about 40 miles by circuitous road  
west of Moab, San Juan Co.,  
Utah. Twp. 28 S., R. 19 E.

Elevation 5900 feet. Stems loosely  
clustered and taproot and  
branching caudex, forming large  
clumps, but not creeping below  
ground. Flowers blue, the keel  
purple tipped, the banner with  
a central white spot.

*Lupinus argenteus* Pursh,  
sens. lat. ✓

*Lupinus*

(13)

9071 - May 22, 1961 Sandy  
soil along ridge between  
the Colorado River and the Green  
River,  $2\frac{1}{2}$  miles southwest of  
The Neck, and about 38 miles  
by circuitous road west of  
Moab, San Juan Co., Utah.

Twp 27 S., R. 19 E. Elevation 5900  
feet. Leaves green, not glaucous.  
Flowers yellow.

*Cymopterus newberryi* (Wats.)  
Jones

*Cymopterus* (2)

9072. May 23, 1961. Barren,  
rocky clay slopes derived mainly  
from the Harrison formation  
(a pale green, seleniferous shale),  
across Courthouse Wash from  
Former Courthouse Spring, 16 miles  
northwest of Hatch, Grand  
Co., Utah. Twp. 24S., R. 20E.,  
S. 16. Elevation 4500 feet.  
Not in the most extreme habitats.  
Stems clustered and taproot and  
branched caudex. Heads yellow;  
rays mostly 10-15, typically 13.

*Bahia nudicaulis* Gray

*Bahia nudicaulis*; 35

9,73 - May 23, 1961

Sandy bottoms with *Artemisia*  
*tridentata*, along Canebrake  
Wash at Lamer Courthouse Spring,  
16 miles northwest of Moab,  
Grand Co., Utah. Twp. 24S,  
R. 20E., S. 16. Elevation 4450 feet.  
Shrubs 3-8 dm. tall, aromatic.  
Corolla very pale blue-lavender.

*Polionantha incana* (Torr.) Gray

*Polemonium* (5) ✓

9074 May 23, 1961 With  
*Antennaria tridentata* and  
*Sarcobatus vermiculatus* in  
sandy bottoms along Court-  
house Wash at Lower Courthouse  
Spring, 16 miles northwest of Moab,  
Grand Co., Utah. Twp. 24S,  
R 20E, S 16. Elevation 4450 feet.  
Leaves bright green, forming a  
flat rosette at or a little above  
the surface of the ground.  
Corolla pink small, white,  
the throat pale yellowish.

*Gilia leptomeria* Gray

*Gilia* (24) ✓

9575 - May 23, 1961  
With *Artemisia tridentata*  
in sandy bottoms along  
Courthouse Wash at Lower  
Courthouse Spring, 16 miles  
northwest of Moab, Grand  
Co., Utah. Twp 24S, R. 20E, S. 16.  
Elevation 4450 feet.  
Corolla light pink-lavender.

*Nema densum* Lemmon  
var. *paviflorum* (Greenm.)  
C. L. Hitchc.

nama (4)

9076 - May 23, 1961. Same  
place as 9075. Corolla white.

*Phacelia ivesiana* Torr.  
var. *ivesiana*

1075

*Phacelia* (1)



9077 - May 24, 1961

Sandy soil along ridge overlooking  
Hobbin Valley from the west, 50  
miles southwest of Gallatin River,  
Emery Co., Utah. Twp. 26 S.,  
R. 11 E., about S. 10. Elevation  
5000 feet. Plants smelling  
mildly of selenium. Stems  
clustered and taproot and  
branched caudex. Flowers bright  
purple, the wings white-tipped.  
Pods flattened, wholly 1-celled,  
erect or nearly so.

*Astragalus woodruffii* Jones  
ident. R. C. Barneby

*Astragalus* - subserotus

(35) ✓

9078 - May 24, 1961 - Same  
place as 9077. Plants varying  
from taprooted, with loosely  
clustered stems, to single-  
stemmed from a creeping root,  
usually somewhat intermediate  
between the two types. Stems  
ascending. Flowers lavender.  
Pods flattened, wholly 1-celled,  
irregularly and rather stiffly  
spreading-descending.

*Astragalus episcopus* Wats.

det. R. C. Barneby

*Astragalus*

(35) ✓

9079 - May 24, 1961.  
Same place as 9077.  
Sepals pale greenish;  
petals light yellow

*Asclepias macrosperma* Eastw.

Asclepias (2)

9080 - May 24, 1961.

Same place as 9077. Only a

few scattered plants seen.

Perianth white or faintly anthocyanic.  
Leaves thick, elliptic in  
section, not channelled.

*Allium macropetalum* Rydb.  
Dupl. det. Marion Cronley

*Allium* (6)

9081 May 20, 1951 Sandy  
flats a mile northwest of  
Hollin Valley, about 50 miles  
southwest of Green River,  
Emery Co., Utah. Twp. 26 S., R.  
11 E., S. 3 or 10. Elevation  
about 5000 feet. Plants smelling  
of selenium. Flowers  
lavender - pink.

*Astragalus flavo flavus* Nutt.  
var. *argilloeus* (Jones) Barnby  
incl.

det. R. C. Barnby

*Oenothera* (35)

9082 - May 24, 1961

Sandy elevated flats a little  
northwest of Goblin Valley, 50  
miles southwest of Green River;  
Emery Co., Utah. Twp. 26S., R. 11E.,  
about S 10. Elevation 5000 ft.  
Petals white, turning pink in  
wilting

*Oenothera albicantis* Pursh

*Oenothera*

(5)



9083 - May 24, 1961. Same  
place as 9082. Corolla white

*Phacelia ivesiana* Torr.  
var. *ivesiana*

*Phacelia*

(13)



9084 May 24, 1961. Same  
place as 9083. Flowers blue,  
the banner with a large  
white spot.

*Lupinus pusillus* Pursh  
var. *pusillus*

*Lupinus*

(4)





9085 - May 24, 1961

Same place as 9082.

Petioles white,

*Erigeron albonotatus*  
(Juss.) Juss.

Lloydia

(7)



9086 - May 24, 1961  
Sandy slopes near Go! River, 50 miles south of Green River,  
Emery Co., Utah. Twp. 26 S.,  
R. 11 E., about S. 10. Elevation  
5000 feet. Flowers yellow.

*Cryptantha flava* (A. Nels.)  
Payson

Yellow *Cryptantha*

(6)



9057 - May 25, 1961 Shift-  
ing sand-hills near Goshute  
Valley, 50 miles southwest of  
Garden River, Emery Co., Utah.  
Twp. 26 S., R. 11 E., about S. 10.  
Elevation 5000 feet. Shrubs  
partly buried in the sand,  
extending 2-5 dm. above the  
surface. Corolla lavender,  
finely purple-dotted at  
the base of the lower lip.  
Plants aromatic.

*Polionintha incana* (Torr.) Gray

*Polionintha*

(10)



9088 - May 25, 1951

Barren sandy clay slopes near  
Hoblin Valley, 50 miles  
southwest of Green River,  
Emery Co., Utah. Twp. 2 - S. R.  
11 E., about S. 10. Elevation 5000  
feet. Petals yellow, finely  
red-dotted below middle.  
Leaves bright green, forming a  
basal rosette.

*Oenothera eastwoodiae*  
(Munz) Raven.

*Oenothera*

16



1057 - May 25, 1961.

Sandy slopes near Goblin  
Valley, 50 miles southwest  
of Green River, Emery Co., Utah.  
Twp. 26S, R. 11E, about S. 10  
Elevation 5000 feet. Plants  
spreading by creeping roots.  
Poreanth white.

*Abronia pumila* Rydb. (senou  
Standley)

*Abronia*

(9)



9090 - May 25, 1961

open, sandy flat slopes  
near Goblin Valley, 50 miles  
southwest of Green River,  
Emery Co., Utah. Twp. 26 S., R. 11E,  
S. 3 or 10. Elevation 5000 feet.  
Leaves bright green, not glaucous.  
Flowers yellow. Wings of the  
front slightly to strongly  
corrugated, the margins  
becoming white-cartilaginous  
at maturity.

*Cymopterus fendleri* Gray

*Cymopterus*

(10)

2300. May 25, 1961

Open, sandy shale slope, north-  
east exposure, on the south  
slope of the San Rafael Swell,  
29 miles north of Hanksville,  
Emery Co., Utah. Twp. 25 S., R. 11 E.,  
S. 1. Elevation 5600 feet. Plants  
forming little, rounded cushions.  
Perianth white to pinkish.

*Ericogonum* 'bicolor Jones

*Ericogonum*

(11)



9092. May 23, 1961. Open,  
shaly ridgetops, with scattered  
junipers, on the San Rafael Swell,  
30 miles north of Hanksville,  
Emery Co., Utah. Twp 25S,  
R. 12E, S. 4. Elevation 5800 feet.

*Astragalus musiniensis* Jones

det. R. C. Barneby

*Astragalus*

①





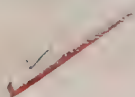
9313 - May 25, 1961

In open pinon juniper  
mesa land on rocky sandstone  
ridges on the San Rafael  
Swath, 34 miles north of  
Hanksville, Emery Co., Utah.  
Twp. 24S, R 11E, about S. 19.  
Elevation 6500 feet. Herbage  
glaucous. Fl. corolla bright  
blue-lavender.

*Penstemon pachyphyllus* Gray,  
sens. lat.

*Penstemon*

(6)



9094 May 25, 1961 - Rather  
sandy soil on open rocky slopes and  
ridgetops on the San Rafael  
Swell, about 30 miles  
north of Hanksville, Emery  
Co., Utah. Twp. 23S., R. 11E.,  
S. 5. Elevation 6700 feet.  
Bracts scarlet

*Castilleja scabrifolia* Eastw.  
Dupl. det. Marion Arunberg

*Castilleja*

(9)

9095 - May 25, 1961.

Lamprolaima 9095. Heads  
yellow. Rays 8-15, mostly  
8 or 13.

*Hymenoxys acutis* (Pursh) Parker  
var. *arizonica* (Greene) Parker

*Haplophragma*, 8-13 rays

(7)

9096 - May 25, 1961 - Barren  
shaly slopes, with scattered  
pinons and junipers, near  
Cedar Mountain, about 39 miles  
west of Green River along  
the road to Castle Dale  
(the Spanish Trail), Emery Co.,  
Utah. Twp. 19S., R 12E.  
Conch white with an inconspic-  
uous yellow eye, the lobes not  
becoming reflexed.

*Cryptantha echinoides* (Jones) Pays.

*Cryptantha* (13) ✓

9087 May 25, 1961

*Lamprolaima* 9096

Herbage glaucous. Sepals  
pale greenish; petals  
bright purple.

*Asclepias cryptoceras* ① ✓

9098 - May 25, 1961 - open,  
rather sandy, gentle slopes,  
with scattered bunch grass and  
a few junipers, near Cedar Mts.,  
about 39 miles west of Green  
River, along the road to  
Castle Dale, Emery Co., Utah;  
Twp. 19S., R. 12E. Sepals purple;  
petals pale.

*Asclepias cryptoceras* Wats.  
var. *cryptoceras*

*Asclepias nuttiae* Maguire

Asclepias - part

*Asclepias*

①



9099 - May 25, 1961. 2 Top

east face of conglomerate reef,  
about 27 miles west of Green  
River, along the road to  
Castle Dale (the Spanish  
Trail), Garfield Co., Utah.  
Twp. 19S., R. 13E., Plants  
aromatic. Heads yellow

Pinon-juniper 3 and 4

1  
*Bahia ovolepis* Blake

*Bahia* 5



9100 - May 25, 1961 - Rocky soil on  
steep east slope of conglomerate  
reef, about 27 miles west of  
Glen River, along the road  
to Castle Dale (the Spanish  
T rail), Emery Co., Utah.  
Twp. 19S. R. 13E. Perianth  
light yellow.

(Piñon - juniper zone)

*Eriogonum glandulosum* Nutt.

annual *Eriogonum*

(B)





9101 - May 25, 1961 - Same place  
as 9100

*Plantago patagonica* Jacq.

✓

*Plantago patagonica* (6)

✓

102. May 25, 1961. Gravelly  
silt at base of conglomerate reef,  
about 2.7 miles west of Green  
River, along the road to  
Castle Dale (the Spanish Trail)  
Emery Co., Utah. Twp. 19S.,  
R. 13E. n. Flamingo Lands under  
Pinon-juniper zone.

*Astragalus flavus* Nutt-  
var. *argillosus* (Jones) Barneby  
inid

det. R. C. Barneby

*Astragalus* ③

7103 May 25, 1961 - Rock  
invasion on western back  
slope of conglomerate rock,  
about 27 miles west of Green  
River, along the road to  
Castle Dale (the Spanish T. rail),  
Emery Co., Utah. Twp. 19S,  
R. 13 E. Corolla white.

(Pinon-juniper zone)

*Yucca congesta* Hook.  
sens. lat.

*Yucca congesta*

Erdoğan

Yemen

1.4 at Panslinsen

U. ... ..

433 ... ..

62.2 at ... ..

35.3 at ... ..

38.6 at Fradins

40.6 at Dunes

43. ... ..

... ..

6 ... ..

74 ... ..

76.8 ... ..

97.2 ... ..

... ..

7 ... ..

749.6 at the Meads

717.7 at ... ..

725.8 at ... ..

736.4 at ... ..

752.1 at ... ..

25

23

48

- 8

40

831.0 at ~~Wichita~~ jet

836.45 at Hoblin jet

845.4 at Hollins

52.7 at jet

55.8 at Engemann

56.8 at Astragalus

60.4 at Penstemon

67.3 at jet - here 36 m. n. 7 Harknessville

68.0 - headed east at 10 E

→  $\begin{array}{r|l} 33 & 34 \\ 4 & 3 \end{array}$  235  
245

70.85 at Erigeron compactus

78.0 at Castilleja etc -

913.0 at jet.

922.15 at Asclepias

35.2 at Silene acaulis

41.9 at high grass

63.3 at Green River

1416  
5.1  
70

646  
63.2

26



- 704.45 at Arch Canyon  
 707.55 at Potholes  
 746.0 at Engerum-shaly  
 748.7 at Fry Canyon elev. 5440  
 760.3 at *Macraeranthera* sandstone  
 766.75 at *Phacelia*  
 769.2 at sandstone  
 774.3 at *Gaillardia*  
 777.6 at Ferry  
 81.5 again at Ferry  
 84.05 at *Lupine*  
 85.2 at *Desmodia*  
 98.2 at Mint - shows 3.10 dm. sandy  
 99.4 at 3 feds  
 804.7 at *Wyethia*  
 809.7 on top of mesa  
 836.1 at Hanksville



10